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BOARD ATTRIBUTES AND INTEGRATED REPORTING: A LITERATURE REVIEW

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ABSTRACT

Past two decades have seen a significant change in corporate reporting trends. Stakeholders these days are demanding not only the financial information about a concern, but also qualitative data relating to social, environmental and governance aspects. In order to fulfil the dynamic information needs of the users of corporate reports and build their trust, the organisations need to create a change in the pattern of communicating information to the stakeholders. This gave rise to the need for a more comprehensive reporting system which is based on holistic viewpoint and integrated thinking. The process of disclosing financial as well as non-financial data in a consolidated report to the concerned stakeholders is known as Integrated Reporting (IR). This paper aims at providing an extensive review of existing research publications on the impact of different board related variables on integrated reporting. It has been observed that academic and research interest in the IR has gained momentum in past few years only. A large majority of the existing works were from the period after 2019. Most of these studies took different corporate governance variables as independent variables and measured their impact on IR. Variables like board independence, size, diversity, CEO duality etc. were widely used in the studies. Other variables like board education, board meetings, board age and diligence were not explored much. It was found that many corporate governance variables had significant impact on IR. The research has implications for future researchers, corporate management and policy makers.

***Key words**: Sustainability; Integrated Reporting (IR); IIRC; ESG; Board.*
***JEL classification**: G30, M40, M41*

INTRODUCTION

Corporate annual reporting plays a significant role in establishing linkage between corporates and their stakeholders since its formation. It acts as a communication tool whereby a concern provides significant financial and other information to various stakeholders to help them in making investment and other relevant decisions. Conventional financial reporting consists mainly of annual financial statements which have been valued as primary source of information for many years. However, increasing level of globalisation with change in technologies together with social and economic changes led to change in the expectations of the stakeholders. The stakeholders today demand not only quantitative information but also information on various qualitative aspects of business-like types of risks involved, different forms of capital, concern's environmental activities, discharge of social responsibilities and intangible aspects affecting the value of the company. Traditional reporting lacks this information and falls short of meeting the expectations of stakeholders. It provides limited information on various crucial factors influencing value creation, strategic plans, and business models. Stakeholders require this information to make right decisions and value judgement. There is growing realization that organizations should start reporting on financial as well as non-financial aspects in an integrated manner so as to meet growing stakeholders' expectations and build their trust. This gave rise to a modern concept of reporting known as integrated reporting. "The process of communicating both financial and non-financial information in a single report to the concerned stakeholders is known as integrated reporting system (Abhishek & Divyashree, 2019)".

Integrated reporting is a part of corporate communication system through which companies can disclose their significant financial as well as other information in a systematic manner using a

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framework given by International Integrated Reporting Council (IIRC). According to the IIRC, "An integrated report is a concise communication about how an organisation's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term (IIRC, 2021)". Over the last decade, integrated reporting has emerged as an upcoming concept which is gaining attention from many countries, organisations and stakeholders. After the release of IIRC framework in 2013, many organizations have started using this approach. But this still being an emerging concept, in most of the countries this adoption is voluntary in nature. The nature and type of board can have significant impact on the extent of integrated reporting and also on its quality. It is therefore inadvertent to check the effect of board attributes on the integrated reporting.

Academic and research interest in the area of integrated reporting has increased during past few years. Numerous studies have been undertaken to examine the extent of integrated reporting disclosures made by various corporations. There are studies on effect of board attributes on the level of integrated reporting. This study aims at conducting an extensive review of literature related to integrated reporting. An attempt has been made to analyse the effect of board attributes on the level of integrated reporting. For this purpose, existing studies conducted during last 10 years from 2013 to 2022 have been reviewed. The papers have been extracted from the SCOPUS database using the search string- TITLE-ABS-KEY ((“Corporate governance” OR “board” OR “CEO” OR “director*”) AND (“Integrated report*” OR “IR”)). An attempt was also made to search for additional articles from Google scholar. The inclusion and exclusion criteria used in the study is exhibited in Table 1:

Table 1- Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
1.Empirical articles on level of integrated reporting and those relating board attributes with integrated reporting (IR). for example- • Board size and IR • Board age and IR • Board independence and IR • Board diversity and IR • Board activity and IR • CEO duality and IR • Audit committee and IR 2. Articles published in journal only. 3. Articles published in English language only. 4. Articles related to business, management and accounting, social science, economics, finance, arts and humanities, multidisciplinary.	1. Papers published in conference proceedings, editorial, commentaries, reviews or chapter in edited books. 2. Articles published in language other than English and are not related to subject categories mentioned in inclusion criteria. 3. Unrelated articles 4. Duplicate articles 5. Unavailable full text or abstract only articles.

Using the abovementioned criteria (Table 1), we shortlisted 352 articles for which abstracts were screened. For 258 articles, abstracts were not found suitable. For remaining 94 articles, full text articles were searched. For 4 studies, full text was not available. The 90 full text papers were thoroughly checked for their appropriateness to be included in the study. During the review process, it became apparent that some papers did not align with the objective of the study, which is to analyse the extent of integrated reporting and to measure the impact of board attributes on integrated reporting. Papers which were primarily theoretical in nature were also excluded. These papers explored topics such as the cultural system of integrated reporting, the emergence of integrated reporting, engagement in integrated reporting, firm characteristics and integrated reporting, among others. Similarly, empirical papers that focused on variables unrelated to board attributes, such as firm performance and integrated reporting or the ability of integrated reporting to improve corporate governance, were not included. The selection process aimed to exclude studies that lacked direct relevance and did not significantly contribute to the study's objective. Finally, 51 empirical articles were shortlisted for the detailed review. More specifically, studies that primarily focused on board attributes such as board age, board independence, board diversity, CEO duality, board activity, and audit committee, and investigated their impact on integrated reporting were selected for the study. An attempt has been made to examine extant literature in the area, to find the research gaps and to provide future research perspectives in the area.

The remainder of the paper has been structured as follows: Section two presents theoretical framework on integrated reporting. Section three deals with review of existing studies in the area. Section four presents discussion and research implications. Finally, section five concludes the paper.

THEORETICAL FRAMEWORK

Integrated reporting is a part of progressive reporting system which focusses on communication of both financial as well as qualitative information related to a concern in an integrated manner. The crux of this system is that it provides a balance between the flexibility in the reporting systems of different organisations, while providing some level of comparability across the corporate units. Integrated report does not provide any indicator for measuring specific performance or provides a measurement criteria or disclosure requirements of individual matters. Rather the makers of the integrated report focus on the need to present their value judgement according to the specific situation of the concern. They need to find the matters which are important and decide on how to disclose them by taking into account generally accepted principles and disclosure norms. At global level, the International Integrated Reporting Council (IIRC) creates a framework for integrating reporting to be used by the concerns.

The International Integrated Reporting Council

The International Integrated Reporting Council (IIRC) is a global organization of regulatory bodies, investors, standard setting organizations, accountants and governments. Established in 2009, IIRC is responsible for creation of a framework on integrated reporting which is internationally acceptable. On 9th December 2013, the first International Integrated Reporting Framework was released by IIRC. The framework was revised from time to time. In Jan. 2021, IIRC came up with a revised version of the framework that emphasized on simplification in the process of preparing

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integrated reports, improving the quality of reporting process and having a large focus on balanced reporting of events and value creation. According to IIRC, from August 2022, the integrated reporting framework would be managed by IFRS foundations.

Purpose of integrated reporting

IIRC is of the view that companies must communicate all information which reflect its ability to create value overtime. According to IIRC "The main purpose of integrated reporting is to establish Guiding Principles and Content Elements that govern the overall content of an integrated report, and to explain the fundamental concepts that underpin them." There are three fundamental concepts in integrated reporting (IR) namely "values creation for the organization and for others; the capitals and the value creation process". The IR aims to focus on the value which a concern creates overtime for the organization itself and for the other stakeholders. For creation of this value, various resources are used by the concern known as capitals using some business model.

Capitals and business model

An important concept used in integrated reporting is the resources used by the concern in creating the value for the concern and the stakeholders. These resources have been categorized under the framework into six capitals namely "financial, manufacturing, human, intellectual, social and relationship, and natural capitals". The integrated report of the concern should focus on disclosure of relevant capitals. The report should also cover the process of creating value and the business model which can create this value. "At the core of the organization is its business model, which draws on various capitals as inputs and, through its business activities, converts them to outputs (products, services, by-products and waste). The organization's activities and its outputs lead to outcomes in terms of effects on the capitals" (IIRC, 2021). Thus, the framework emphasizes on disclosure of relevant capitals, the business model and the process of value creation in the integrated report of the concern. The framework provides some principles for the preparation and disclosure of integrated reports.

Guiding principles

For preparation of integrated reports, the IIRC framework talks about seven guiding principles namely "strategic focus and future orientation, connectivity of information, stakeholder relationships, materiality, conciseness, reliability and completeness, and consistency and comparability." These principles provide the foundation for preparation and disclosure of integrated reports. The IR deals with the strategies of an organisation that should be related to the future goals of the organisation for value creation. The organisation should disclose the comprehensive view of interrelated factors which may influence process of creation of value overtime. The focus of IR should be on revealing the key stakeholders in the organisation and how the organization takes care of interest of its stakeholders. IR should disclose all the material information related to the organization which may create short-, medium- or long-term value but in a concise manner. It is important to give all the relevant information, positive or negative in an IR so as to provide a clear picture of the organization.

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The information provided should be consistent over a period of time which is comparable with that of other organizations. The content of the report may vary from organization to organization depending upon specific requirements of an organization.

Content elements

Depending upon nature and size of the organization, the integrated report may cover eight key content elements like "organizational overview and external environment; governance; business model; risks and opportunities; strategy and resource allocation; performance; outlook; and basis of preparation and presentation". The coverage of IR finally depends upon circumstances of the organization and discretion of the management. The report should consider information needs of all the relevant internal and external stakeholders. These stakeholders may include employees, shareholders, lenders, customers, suppliers, regulators etc.

Benefits of integrated reporting

According to IIRC, integrated reporting should form part of all forms of corporate communication, external or internal. At internal level, when integrated thinking is imbibed in business activities, it facilitates management decision making. It improves employee engagement by building an integrated thinking process while doing any activity in the organization. An integrated report embodies various pillars of good governance like accountability, transparency, integrity and stewardship. Management tries to ensure credibility, reliability and integrity of information provided in integrated reports. The report provides a clear picture of the tasks and responsibilities of various individuals in an organisation and what value they are contributing towards success of the organization. This helps in fixing accountability. The information is presented with clarity and openness as stakeholders these days demand greater transparency of organisation reports. By clearly explaining how decisions are taken under the organization, some integrity is created which shows calibre of the relationship of the organization with all the stakeholders. One major responsibility of the board is stewardship which entails maximising the use of various resources to add value and support the organisation's future growth.

Integrated reporting focuses on 'one report' by taking a multi-capital system. Emphasis is on measuring and reporting the overall performance of an organisation to the concerned stakeholders. Reporting quality will improve as both financial and non-financial performance is reported at a single place together. It leads to ease of access and provides a clear picture of the organisation's viewpoint as a whole. Such a reporting helps in increasing value of the stakeholders in the organization. It facilitates investment, credit and other decision making by the stakeholders. Increasing efficiency and transparency in the reporting system benefits the society in the long run as organisation reveals all the relevant information about the organisation to the external world in an efficient and transparent manner. Thus, integrated reporting upgrades overall corporate communication system.

LITERATURE REVIEW

This section presents review of existing studies conducted in the area of integrated reporting.

Studies on level of integrated reporting

Numerous studies (Pistoni et al. 2018; Iredele, 2019; Abhishek & Divyashree, 2019; Nguyen et al., 2022; Hamad et al. 2020) were conducted in the recent past to check level of integrated reporting by various organizations. Pistoni et al. (2018) evaluated the quality of integrated reports (IR) issued by firms by posing research questions relating to the standard of integrated reports and whether there is any improvement in this standard overtime. Using 116 IRs published during 2013 and 2014, IR scorecards of the companies were analysed. It was found that that the standard of IR was poor. Though the IR quality improved over time, the improvement was only gradual. Businesses, in general followed the IR framework, but not much information was disclosed on important factors like capitals, the business model, the process of creating value etc. The emphasis was more on the form of IR, rather than on its content.

In a study of 20 top companies taken from the Johannesburg stock exchange, Iredele (2019) examined the association in the length of integrated reports (IR) and their quality. The work measured the effect of profitability, leverage, size of the board, females on board and firm size on the quality of the IR. The study was conducted for a period from 2013 to 2017 using annual reports of the companies. For analysis of data, Spearman rank correlation and Kruskal Wallis H tests were conducted. A positive association was found between length and quality of the IRs. Except for leverage, all other variables were found to have influence on the quality of the IR. Abhishek & Divyashree (2019) conducted a study to evaluate the current scenario of integrated reporting in Indian context and to check the extent to which companies in India are complying with IIRC guidelines. The study discussed the need, importance, framework and applicability of IR in India. The study focussed on two capitals (human capital and social relationship capital) out of 6 capitals. A sample of 8 Indian companies was taken using convenience sampling. Using a disclosure index, content analysis was conducted on data for a period from 2017 to 2018. It was found that 75% of human capital information and 70% of social relationship capital information was voluntarily disclosed by the selected companies. The study concluded that Indian companies were moving towards international social reporting practices and it will motivate other companies to practice integrated reporting voluntarily.

Nguyen et al. (2022) tried to examine the level of IR disclosures by 200 listed companies in Vietnam. IR disclosures were checked in annual reports using a disclosure index. It was found that on an average only 43% of the information was disclosed by these companies as per requirements of IIRC framework. IR was found to be a new concept in Vietnam. Positive association was found between IR disclosures and many of the selected independent variables like independence of board, audit quality, ownership etc. Hamad et al. (2020) suggested a conceptual framework of integrated reporting. An attempt was made to check the relationship between corporate governance variables and the level of integrated reporting taking sustainability reporting as moderator. According to the

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authors, the proposed framework can be very useful in assisting the companies in adoption of IIRC framework to increase transparency and improve value.

Studies relating multiple board features with overall level/quality of integrated reporting

There were many studies (Frias-Aceituno et al., 2013; Dilling & Caykoylu, 2019; Cooray et al., 2020**;** Wang et al., 2020; Tiron-Tudor et al., 2020; Halid et al., 2021; Girella et al., 2022; Dragomir & Dumitru, 2023) which checked influence of multiple board features on overall level of integrated reporting. Frias-Aceituno et al. (2013) analysed the impact of board features on degree of IR disclosures. Taking a sample of 568 non-financial MNCs for a period 2008-2010, Tobit regression was used to analyse the data. It was found that board size, board containing experienced directors and board diversity had a positive impact on IR. No relationship was found between activity level of board and IRQ.

Suttipun & Bomlai **(**2017) studied integrated reporting in annual reports of companies in Thailand. A sample of top 150 firms was selected using simple random sampling. CSR awards, board size, board independence, CEO duality, institution owned, family owned, government owned companies were taken as independent variables and their association with integrated reporting quality was analysed. The level of integrated reporting was found to be significantly positively associated with each of the institution-owned firms, board size, and CSR awards. However, the level of integrated reporting was not found to be significantly associated with family-owned companies, government owned companies, board independence or CEO duality.

Taking a sample of 110 global companies, Dilling & Caykoylu (2019) tried to analyse the overall determinants of integrated reporting quality (IRQ). Results of regression analysis showed a significant negative relationship between IRQ and the variables like gender diversity, board independence, profitability, leverage, report length etc. However, the location and industry group and report quality were not found to be significantly related to the quality of IR. Cooray et al. (2020**)** examined impact of governance systems on the standard of integrated reporting (IR). To evaluate the standard of IRs, the study first designed an index. After that, the content of 132 IRs of Sri Lankan publicly traded companies was analysed. Using regression techniques, it was demonstrated that, apart from board size and the presence of a separate committee for managing risk, the corporate governance mechanism offers little support for the providing value creation related information to the stakeholders through IR.

Wang et al. (2020) studied the impact of corporate governance variables on the variation in the integrated report quality. A sample of 100 firms listed on Johannesburg stock exchange was taken. The study period was from 2012 to 2015. Board, audit and sustainability committee were taken as independent variables. They were measured on the basis of four factors such as size, expertise, independence, diligence. Integrated reporting quality (IRQ) was taken as dependent variable. Regression results revealed that board attributes and audit committee features had a positive impact on IRQ, while sustainability committee had incremental positive impact on IRQ. A research work by Tiron-Tudor et al. (2020) examined the relationship of board of directors' characteristics with the integrated reporting score. Using a disclosure index, the study examined if the integrated reports were aligned with IIRC framework. Data was taken for a sample of 98 companies from Europe for a period from 2013 to 2017. Few non-parametric tests were used to examine the data. The results highlighted that longer board tenure and more outside directors led to greater disclosure in IR. However, companies with a larger board, gender diversity and activity of board had an insignificant effect on integrated reporting disclosure.

Halid et al. (2021) in their study analysed the influence of board features such as size, independence, activity and diversity of the board on integrated reporting disclosure (IRD) of eight selected listed Malaysian commercial banks. The study was conducted for a period from 2013 to-2017. Regression analysis exhibited that there was a significant negative relationship in board size and IRD. The disclosure of IR was not found to be impacted by board independence, activity and diversity. Girella et al. (2022) examined the impact of selected board attributes on integrated report disclosure. A total of 2103 firm year observation were taken from 2015-2018 for companies that were listed on European stock exchange. All the selected board variables (board size, independence and meetings) were found to have significant and positive association with integrated reporting disclosure.

Using panel data for 253 listed European companies which were part of ESG index for a period of 2010 to 2019, J. Chouaibi et al. (2022) studied the association between selected board features and integrated reporting quality. The regression results showed positive relationship between quality of IR and variables like board independence, diversity of board and good corporate governance. Fayad et al. (2022) studied the influence of board attributes on IRQ in Malaysian companies. A sample of 64 top listed companies was taken from the period 2017-2020. A panel regression analysis was used to analyse the data. It was found that board expertise has no significant relationship with IRQ of Malaysian listed companies. IRQ was found to be positively associated to board size, diversity and activity. Hichri (2022) examined the relationship between corporate governance variables and integrated reporting (IR). A sample of 120 non-financial listed French companies was taken. The study was conducted for a period from 2016 to 2019. The results of panel regression analysis highlighted that board diversity and audit committee were positively related to integrated reporting, whereas other variables like board size, CEO duality did not affect the integrated reporting.

Qaderi et al. (2022) examined the effect of the board attributes on the quantum and standard of IR disclosures. The authors investigated how the presence of a sustainability committee might impact the above-mentioned association. Data was taken for all Bursa Malaysia listed companies that used an IR strategy between 2017 and 2020. The study used an index with 100 items to conduct content analysis. Regression results revealed that board characteristics such as size, independence, gender diversity, meetings and non-executive compensation had significant positive relationship with IR disclosure The presence of multiple directorships had no impact on IR disclosure, though. Songini et al. (2022) conducted a research to check effect of board features on integrated reporting. 212 integrated reports were taken from IIRC for the study. IR quality was found to have positive association with the education level of the board members, but it was negatively related to women on board.

Studies focussing on board attributes and one of the six capitals

There were few studies (like Vitolla, Raimo, Marrone et al., 2020; Raimo et al. 2020; Raimo et al. 2021; Velte, 2022) which examined disclosure of one of the six capitals given under IIRC framework and its relationship with board features. Vitolla, Raimo, Marrone, et al. (2020) took a sample of 130 international firms. The purpose was to check the influence of board attributes on the intellectual capital disclosure quality (ICDQ). Using a scoring system, the study measured the ICDQ. A positive association was found between board attributes like board size, independence, diversity and activity with the ICDQ. Raimo et al. (2020) analysed different variables that influence human capital disclosure in the integrated report and the information that were there in integrated report regarding human capital disclosure. A sample of 137 worldwide firms were selected that showed integrated report in year 2018. Regression results showed that size of the firm and board independence, size and diversity were significantly positively associated with human capital disclosures of the firms made in IRs. However, profitability was not found to be significant.

Raimo et al. (2021) assessed how corporate governance practices affect the level of environmental information that businesses disseminate using integrated reporting. Using a 30-item disclosure index, content analysis was conducted to evaluate the extent of environmental information disclosed by sample companies. Regression results indicated the presence of a corporate social responsibility committee, board gender diversity, and board size to have a positive impact on the disclosure of environment related data. Raimo et al. (2022) determined how board features, which are a form of corporate governance, affect risk disclosures made in the integrated reports. The study used a sample of 95 IR adopters from 24 nations in the year 2018. The firms were found to be slow in recognising potential of IRs in disclosure of risk. Gender diversity, Board independence, and frequency of meetings were found to be the main drivers of the risk disclosures made in the IRs.

Velte (2022) investigated how materiality disclosure quality (MDQ) in integrated reports in a global context was influenced by sustainable corporate governance. Based on 672 (firm-year) observations from European and South African companies between 2014 and 2019, the study found that executive compensation related to sustainability and board gender diversity were significantly positively correlated with MDQ. However, sustainability committees were not found to have impact on MDQ.

Indian literature

There were not many studies conducted in Indian context on integrated reporting. Most of these studies were related to analysis of integrated reporting practices of companies in India (Athma & Rajyalaxmi, 2022; Ghosh, 2019; Abhishek & Divyashree, 2019). Athma & Rajyalaxmi (2019) in their study examined the integrated reporting practices of BSE 30 companies. It compared integrated reporting practices of South African companies and Indian companies. Data was taken for a period from 2004-2014. Item-wise and company-wise disclosure were used to analyse data through mean disclosure, standard deviation and coefficient of variation. Both Indian and South African companies were publishing full-fledged integrated reports. Results revealed that financial and human capital were disclosed by each company and no BSE listed company showed Intellectual capital. The study also revealed that BSE companies disclosed 100% items on financial and governance aspects. Environment and social aspects showed an increasing trend towards disclosure. It was concluded that there were certain variations in the disclosing of non-mandatory information by the companies.

Ghosh (2019) analysed the number of companies who have adopted integrated reporting and whether they were disclosing the content element and different forms of capital. A sample of 102 companies from the ET 500 list was taken. The study was conducted for a period from 2010-2016 and banks were excluded from this category. Longitudinal qualitative document was used to analyse the data. Results revealed an increase from zero percent in 2010-2011 to 4 percent in 2015-16 in percentage of companies that showed integrated reporting in their annual report. The study found that an average of 70% of integrated reporting disclosures were there but most of these failed to disclose the business model, strategy and manufactured capital data as required by the IIRC.

Board attributes analysed

An attempt was made to examine the board attributes used by the sample articles. An analysis of extant literature revealed that existing studies focussed on certain board attributes. Table 2 shows the most researched board attributes.

Table 2-Most used board attributes

S.No.	Board attribute	No. of articles using it
1.	Board diversity	30
2.	Board size	29
3.	Board independence	28
4.	Board activity	13
5.	CEO duality	6
6.	Audit committee	6

Table 2 exhibits that Board diversity was the most researched board attribute with 30 articles using it, followed by board size with 29 articles and board independence with 28 articles. Many studies (e.g.Tiron-Tudor et al., 2020; Halid et al., 2021; Qaderi et al., 2021; Vitolla, Raimo, Marrone, et al., 2020; Raimo et al., 2022) measured impact of all these variables on the quality of integrated reporting. Majority of the studies found a positive impact of these board attributes on integrated reporting practices of the firms. Large size boards with more independent and diverse directors were found to have more representation of different stakeholders leading to a push in integrated reporting activities by many studies. 13 studies (e.g.Velte, 2022**;** J. Chouaibi et al., 2022**;** Songini et al., 2022**;** Vitolla, Raimo, & Rubino, 2020; Bektur & Arzova, 2022) investigated impact of board activity (measured by number of board meetings) on the quality of integrated reporting. Board acitivity was found to be positively related to the integrated reporting by most of these studies. Only few studies (e.g. Dragomir & Dumitru, 2023**,** S. Chouaibi et al., 2021**;** Hichri, 2022**;** Cooray et al., 2020**)** studied the impact of CEO duality on Integrated Reporting Quality (IRQ). All these studies found that CEO duality had non-significant impact on the disclosure of integrated report. Some studies (e.g. Nguyen et al., 2022 **;**Wang et al., 2020**;** Hichri, 2022; Chariri & Januarti, 2017, Velte, 2018)) measured the impact of Audit committee features on integrated reporting disclosure. All of these studies found that audit committee features like financial and sustainability expertise of members of audit committee have a positive and significant impact on Integrated Reporting Quality.

Board education, age, expertise, attributes of CEOs, presence of sustainability committee etc. were few other variables less explored by the researchers. There were one or two studies which analysed these other corporate governance variables like board education (Songini et al., 2022); CEO expertise (Wang et al., 2020); risk management committee (Hamad et al., 2022), sustainability committee expertise (Velte 2022), CSR committee (Raimo, 2021), ownership (Nguyen et al., 2022), good corporate governance (Chouaibi et al) etc. Future research works can explore these less researched variables for checking their impact on integrated reporting level and quality.

DISCUSSION AND RESEARCH IMPLICATIONS

A review of national and international literature on corporate governance and integrated reporting (IR) reveals that most of the studies conducted in this area are from the period after 2019. This shows that this is comparatively a new research area. A large majority of the existing studies are from countries outside India. Majority of studies have been conducted in South Africa, Europe and Malaysia. There were some global and multi-country studies also. More of such studies can be conducted by future researchers focussing on cross country comparisons. In Indian context, existing studies are primarily based on theoretical aspects. There are few empirical works, but these are mainly limited to checking integrated reporting using some disclosure index. These studies focussed on analysing disclosure of different forms of capital by companies. The existing Indian works were based on small samples and covered limited time frame. No empirical work could be found in Indian context on popular databases focussing on the impact of board attributes on IR. Hence a research gap was found in the area. More studies can be conducted in India mainly checking determinants of integrated reporting.

Majority of studies took different corporate governance variables as independent variables and measured their impact on IR. Variables like board independence, board size, board diversity, board activity, CEO duality etc. have been widely used in the studies. These were most researched board attributes. When we checked direction of relationship of these attributes with the IR, it was found that majority of studies found positive relationship between board independence, board size, board diversity and board activity with integrated reporting quality. There were few studies which found no significant or negative correlation of these variables with integrated reporting. Almost all the studies did not find any significant impact of CEO duality on the disclosure of integrated report. Other variables like age of board members, education of board, expertise of board, CEO compensation, existence of CSR/sustainability committee, risk committee etc. have not been explored much. Future research works can focus on checking impact of these variables on corporate integrated reporting. There were few studies which took corporate governance as mediating or control variables.

A detailed analysis of research techniques and sample showed that most of the existing studies used various regression techniques to examine the influence of board attributes on the level of IR. Only a few studies used other methods. Future researchers can focus on using other research techniques also such as Kruskal wallis H test, spearmen correlation, matched pair analysis and structural equation modelling (SEM). A large majority of the studies used companies as sample, while studies involving non-corporate organizations like banks, hotels, educational institutions etc. were negligible. Hence, a research gap was found. There is ample scope of future research in analysis of integrated reporting practices of non-corporate organizations.

CONCLUSION

Past two decades have seen a significant change in corporate reporting trends. Growing awareness about the need of incorporating sustainability into business practices in order to help an economy in meeting its sustainable development goals (SDGs) has created a paradigm shift in the information needs of the users of corporate statements. In order to fulfil the dynamic needs of the stakeholders and build their trust, the organisations need to create a change in the pattern of communicating information to the stakeholders. This gave rise to a new trend in reporting namely the integrated reporting. Integrated reporting (IR) is considered to be better way to communicate corporate information as the focus is on integrated thinking with long term perspective and dissemination of all material information in an integrated report to the concerned stakeholders. By adopting an IR framework, an organization can disclose a fair view of the affairs of the company to the relevant stakeholders so as to help them in making better decisions.

Integrated reporting, being voluntary in nature, is impacted by discretion of board of directors. The present study focused at analysing the impact of different board attributes on integrated reporting in different countries using an extensive review of literature. After, going through national and international literature, it has been found that integrated reporting is an emerging research area. The review showed that gradually companies are moving towards adopting IR. Stakeholders' pressure has led many big corporates across the world to move from traditional financial reporting to IR. The study puts forward the need for popularizing the benefits of integrated reporting in order to encourage more companies to use this new concept of reporting.

It has also been understood from the studies that adoption of integrated reporting has a direct impact on firm's share value, performance and profitability. It has also been found that board independence, size, activity and diversity play a significant role in influencing the quantity and quality of integrated reporting. In Indian scenario, this area has not been explored much. There are limited number of studies in the area in India. Most of these studies are theoretical in nature. There are few empirical studies, but these are limited to examining disclosure of various capitals by organizations. Further research can be conducted to analyse integrated reporting practices of companies in India using a wider sample and covering a longer period. Examining integrated reporting by banks and financial institutions can be another research area. In nutshell, the study found ample scope of future research in the area.

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